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# A Business perspective of commercial animation

Nadja Sherelis

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"A Business Perspective of Commercial Animation"

Thesis Report

by

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## **I INTRODUCTION**

This paper is designed to give you a better understanding of what you can expect when you're out in the work force and begin to obtain paying animation jobs. You may be wondering what a student knows about this. Maybe some information of my background will help. I have an Associate Degree in commercial art and a Bachelor of Arts Degree in graphic design. After completion of my Bachelor's Degree I worked in the advertising field for three years before I began my work toward a masters degree. I continued working in the Advertising field throughout my Masters Degree program giving me a total of seven years experience to date. Upon completion of my course work at Rochester Institute of Technology I decided to start my own business doing graphic design work as well as focusing on creating a complete animation studio. Much to my surprise, my business, Vantez, Incorporated was able to obtain several animation jobs in the first year of its operation. The most important thing an animation company needs is an animation demo tape. I am going to outline for you how I put together my demonstration tape, and I will explain to you a little about what it is like to do a job from start to finish for a paying client.

## **II THE ANIMATION DEMONSTRATION TAPE**

It took me two years and a lot of money to put together my animation demonstration tape. I wanted a clean, polished, professional tape so I used the assistance of experienced editors and studios that could provide special sound effects. The completed animation tape is approximately 4 minutes in length. It's important not to have a demo that exceeds 5 minutes in length, because as wonderful as your work may be you can easily lose the attention of the viewer if it is too long. I wanted the tape to contain animations that showed what I do well and examples of what I want to do. Since Vantez, Inc. primarily contracted jobs from companies such as Eastman Kodak Co. and Xerox, many of the animations I did for them were paper paths in a copier machine. This I do well, but it does not illustrate what I'm striving to do throughout my animation career. For self promotion I created a couple of animations on my own to show my abilities beyond the paper path. Now lets look at each of the animations on the tape in order:

### **A THE VANTEZ OPENING**

**Client: Vantez, Inc., Rochester, NY**

Every company (or person(s)) should have a logo or mark that expresses what they are about. This logo or trade mark is often used as the opening of your demonstration tape. It reminds the viewer who you are when he/she sits down to watch the tape. The Vantez opening is approximately 20 seconds in length. The name Vantez is of a simple type face called Peignot. I wanted something that was clean and bold but had a feel of sophistication. The curl was added as a symbol to represent 3D modeling, which is the core of 3D animation.

I began by creating the logo (minus the curl) on the Macintosh using the software Adobe Illustrator version 5.0. Topas will allow you to import outline text from Adobe Illustrator as a model. You can achieve this by saving the outline in Adobe as an Adobe Illustrator 88 file (filename.ai). Once imported into Topas you must drill out the insides of letters such as A, B, D, deleting the drilling polygon. After this I extruded the type to give it a 3D look. Next I created the curl using the build/simple/circle menu and making a small circle. I used spiral under the build/complex menu to turn the circle into a curl. Since I wanted only one loop in

my curl I set both the number of faces and the number of loops to be 100%. This gave me a very smooth finish and 100 divided into 100 equals 1, which gave me only one loop. I set the radius change between loops to 0%, because I wanted the curl to be straight up and down. I set the height change between loops to be 200% so that there would be a noticeable height. Last I set the horizontal shift between loops at 0% to ensure no horizontal shifting (lean) on the curl. Then I placed my axis about 1/2 inch from the circle with a vertical line. Once I got the curl to look as I wanted I placed all the elements together on the screen in the position that I wanted my animation to end in. By doing this I can set my first keyframe and my last keyframe going back and only editing my first keyframe for movement.

Next I created a background in a software program called Painter by Fractal Design. I was inexperienced with this program so everything I did was strictly experimental. I'm not really sure how I achieved the painterly look of the background but I liked what I saw and decided to use it. Then I created another texture map using Painter again. I wanted something that contrasted with the background I had created, but still would fit aesthetically. I used a procedure called water and added splashes of color. I imported the texture map as a targa file (filename.tga) into Topas. With this texture map I mapped the letters "Vantez, Inc." and the bars below it. I also put a slight transparency on the letters to give it a softer look. I liked what I saw and was ready to script. I started off by editing keyframe 1 only, creating a simple fly in. I wanted the letters to come in close to the camera so that you weren't sure of what you were looking at in the beginning. I animated the bars and curl to come in at the last moment. With the curl, I set it to be 100% transparent in the beginning ending with 0% transparency in the end. I thought the curl kind of jumped out of the whole image and I didn't want to take too much attention away from the bars. After reviewing the animation I liked what I saw but felt there was something missing. It needed some action in the background. So I did a play off the letter "V". I copied the letter and changed its form a bit just to provide some variation. I deleted the extruded polygons to give it a flat look. Then I duped it off several times creating a pattern. I made two sets of this pattern so that they would intertwine with each other in the animation. One set I made the color green, the other the color violet. I also set their transparency level to about 60% to make use of the background creating the illusion that they were textured mapped.

The newest version of Topas has a function called "set shadow catchers". This function allows you to create a background polygon which will show nothing but the shadows from your animated objects, giving the illusion of shadows on a background. I used this function. After the animation was completed I went to the last frame and added the words "Animation Demo, 1994" to it for a dissolve at the end of the animation. My disappointment was that the luminance level on the letters doubled creating a bleeding effect on video. This I find is often a problem with video. What you see on your animation screen is often much different in color, luminance and saturation when it reaches video. This whole animation looks much better in color on the Topas monitor.

## **B THE LEMON DROP ANIMATION**

**Client: Vantez, Inc., Rochester, NY**

This animation was done as a self promotion piece to show my ability to create character animation. I did not storyboard this, I improvised as I went along keeping what I liked and changing what I didn't like. This animation took 3 weeks of 16 hour days complete from model

to script. The rendering on the other hand was much more time consuming. Due to the limited access of rendering equipment, I had to eliminate shadows and some of the original texture maps. It took over 3 months to render, the reason being it was rendered onto a 3/4" tape at Kodak where the machine was only available on weekends and holidays. It was rendered in segments then edited together.

The model was created using both simple modeling objects and splines. Then a lot of texture maps were used, all created in Adobe Photoshop on the Macintosh. Since much of it is self explanatory I will just point out a couple of the interesting and/or problem parts. For example: in the opening, the effect of the "BAR" sign flickering was done by animating the color of the letters in the time graph editor to turn on and off. The glow was created by making the color set on the letters very high in luminance and saturation giving the bleeding effect on video.

The texture map on the lemons at first showed a visible seam. This was solved by duplicating and mirroring the right side to left side of the texture map so that the two halves would line up like wallpaper.

The easiest part was animating the bottle. It was created using the spline/lathe method. I saved this bottle as an object. Then I pulled points of the bottle to make it look like it was dancing. Then I saved that bottle as an object. I did this several times, each movement being a different object. In the animation I metamorphosed the objects (bottles) together creating a dancing movement. After the entire animation was rendered and edited together it still didn't look like much (even though it was a lot of work). This is where I learned an important lesson about the effects of sound. I hired Dajehlon Studios to add the special sound effects, which made all the difference.

## **C EXTENDING QUALITY**

**Client: Xerox Corporation, Webster, NY**

This is a simple 10 second opening for a video demonstrating one of their color copiers. This was a typical case in which the producer came to me one morning and said they needed an opening done and they needed it within 24 hours for editing. What was not typical was that the producer helped me a lot on the design of this animation because he already had a clear idea as to what he was looking for and had a sample of an animation done previously. Producers often come to you with jobs for a quick turn around but have usually no idea what kind of image they are looking for.

Since the producer gave me so much to go on it was it extremely easy to meet his deadline. However, since I had only once chance to render it due to the time frame, I was very careful to be sure that the colors would be all right on video by rendering a couple of frames as a test before rendering the whole animation.

It took me only about a half hour to do the modeling, fifteen minutes to write the script and about 3 hours to render. The yellow glow over the letters of the last animated title was an effect added in editing.

## **D U.S. FIRST COMPETITION**

**Client: Xerox Corporation, Webster, NY**

This project was to be a 20 second animation opening for a video that illustrated how the engineering employees of Xerox and students of Wilson Magnet High School worked together

to build cars that picked up and carried balls in a basket. These cars were then used in a nationwide competition.

The idea of this animation was that it needed to be designed specifically for use over a live action video of one of the competitions. This means that there had to be a lot of black space for the video to show through. The design is of simple geometric shapes around the sides to add contrast in color and style to the black and white video in the background. I used simple lines, squares, diamonds, etc. animating them rolling and sliding throughout. I also made use of the transparency setting to make certain shapes fade in and out. The most creative part of the animation is the use of text. Letters were dropped and enlarged in each title to add variation. The client was very pleased with this. This animation took a little longer to create only because there were so many different shapes all doing different things.

## **E K.I.S. (Kodak Imaging Service)**

**Client: Eastman Kodak Co., Rochester, NY**

This Eastman Kodak Co. job was one of a series of 3 to be used in a video production detailing services offered in new departments of Kodak. Kodak requires you to submit a storyboard of the intended animation (see Appendix A). This animation is an 8 second pan of a Kodak building. It starts off with a cloud texture mapped on a beveled polygon. The camera pan moves down over the Kodak building and revealing the words "Kodak Imaging Services".

The word "Image" is animated by sliding from the side of the building to the front. This illusion is created by the use of rotoscoping. A separate animation is created with the word "Imaging" moving across the screen on black which is rendered to disk. Then in the final animation a polygon is created around the side and front of the Kodak building. The polygon is project mapped with the first frame of the "Imaging" animation. The setting of the map is for the alpha channel to be transparent, eliminating the black background. Then rotoscope is turned on under the animation menu selecting the first image of the "Imaging" animation and ending with the last image of the animation. You have to set the start and finish frames to calculate the full movement you want so that it ends at the appropriate time. Shadows were turned on for rendering. After the camera pan, the camera pauses for a moment then flies into a window. In the completed video version this is when live action footage begins.

## **F PRINTING PLATE PRODUCTION**

**Client: Eastman Kodak Co., Rochester, NY**

This is a quick 5 second video opening on printing plates. The text was first created in Adobe Illustrator on the Macintosh and imported into Topas as an Adobe Illustrator 88 file. The necessary insides were drilled out deleting the drilling polygon. Then a beveled polygon was created for the plate along with a couple of red bars. The animation was scripted, setting a planar auto environment mapping to create the reflections on the plate. This was done by choosing the environment mapping under the materials/mapping menu. I chose to map the front polygon of the plate. I set the plate shininess level to be very high. I chose the creation method to be "planar" and set the map scale 100% of the screen. I chose environmental mapping over reflection mapping because I wanted the mapping to change with each rendered frame, so that the movements of the elements would follow along. Rendering time is greatly increased using this type of mapping by a factor of 3. This is an important fact to keep in mind because a job deadline may not allow you to use this method. You need to have a lot of

storage space on your system, because each frame is rendered additionally to your hard drive.

## **G JIT QUICK PRINT**

**Client: Xerox Corporation, Webster, NY**

The JIT project is a 10 second animation opening for an informational video on computer printers. First I created an animation with the bars, spheres and globe. The bars are textured mapped with a gradient texture. Upon mapping I set the alpha channel to be transparent, this gave the bars the fall off look. The color is set to be none so that the colors of each bar is determined by what is set through the palette menu. The spheres are just a straight move on the y-axis. The globe is an editing trick. I had supplied the editors with 3 images. One image of the sphere mapped with the black and white globe, a flat polygon mapped with the black and white globe and the flat polygon mapped with the colored globe on white. In the edit process they blended each other. I animated the resulting globe coming in from behind the camera. These elements were rendered to disk to be used in a second part animation as a rotoscope.

The second animation is the flat polygon that starts off full screen pulls back to show a background image. It is on this polygon that I set the rotoscope so that the first animated sequence would show. The color spectrum at the top of the polygon is a second polygon mapped with the spectrum color and attached. I animated the polygon (when pulled back) with the corner folding in. This was done by simply moving the corner point to make it fold in. The pictures of the catalogs and materials were added by the editor in editing.

## **H MARGARET DEFRANCISCO, COUNTY CLERK**

**Client: Eastman Kodak Co., Rochester, NY**

This is a 30 second Margaret Defrancisco spot to air on TV. What you see on the tape is not the completed advertisement but rather just the edited version of my animation.

The scrolling star is another example of what rotoscoping can do. I did an animation of a red polygon moving across a black screen (see Appendix E). I rendered it to disk. The polygon had many points so that I could ensure that the color red would appear only in the areas of importance. In the second animation I then built the star and extruded it to give it a 3D look. I textured mapped the star with the first picture of the red polygon animation. I set rotoscope to be on so that each frame would show more red, creating a scrolling look. I placed the "Margaret" above the star and the "County Clerk" below the star. I scripted the letters "DeFrancisco" to lay in as they do. Then I set a camera revolve and slight rotation on the whole thing. The background moves because I textured mapped a large polygon in the background and had animated it to move sideways so that the background appears to be moving.

The words "Republican Conservative" and the glow and around the words were added by a video editor.

## **I K.I.S. With GLOBE**

**Client: Eastman Kodak Co., Rochester, NY**

This animation is part of the previous Kodak Imaging Services animation. This was to illustrate how Kodak Imaging Services are used worldwide (see Appendix B). The Kodak Imaging Services logo was created in Adobe Illustrator and imported into Topas as an Adobe

Illustrator 88 file. The necessary holes were drilled, deleting the drilling polygon. The logo was extruded and the letters were colored appropriately. Video however does not portray itself easily to the Kodak yellow with fidelity. Kodak is very particular about their trade mark color. I placed a Kodak box on top of a video monitor and played around with the palette menu until the Kodak yellow appeared to be identical to the color on the video monitor. I got it as close as I could but when it was rendered to video there was a color shift. This is an important fact about video to remember, colors on the Topas monitor will be greatly altered when rendered to video. Yellow often appears green, red causes bleeding, orange tends to look brown when converted to video. I suggest you do a test render to video to make sure the colors used in your animation are as you want them to be.

The sphere is texture wrapped mapped with a image of a globe in black and blue. I set the transparency for the alpha channel eliminating the so called water areas. The Texture map has a bumpy texture to it giving the globe a more 3D feel. Then I grouped the logo with the globe so that the same rotational axis could be used for both (setting the axis in the center of the sphere). I rotated the globe to spin and I rotated the logo to revolve around the globe. I also used the camera revolve and rotate so that the globe and logo would appear from below screen with the camera falling back into original position for a full frontal view.

## **J IMPACT COMMUNICATIONS**

**Client: Eastman Kodak Co., Rochester, NY**

The Impact Communications animation is a simple black and white, 2 second opening for a demonstration video on a Kodak copier. What I did here was to import the outline text "Impact Communications" from Adobe Illustrator. I built a rectangle around the words. I used the word "Impact" to drill out the upper part of the rectangle saving the drilling object. Below the "Impact" and around "Communications" I made another rectangle sizing it to fit just inside the first rectangle. I then drilled the first rectangle with the inner rectangle, without deleting the inner rectangle. Next I slightly extruded the first rectangle for some depth. I copied the word "Impact" positioning it to lay on the same top depth as the first rectangle. The inner rectangle was positioned the same. The words "Impact Communications" were also slightly extruded for depth. The other copy of the word "Impact" and the inner rectangle were greatly extruded in a positive direction beyond the camera view. The front and back polygons of the extruded "Impact" and inner rectangle were deleted to create a shell or outline of the first rectangle. This shell is what I used to make the back light look like it was shining through. I did this by coloring them with a transparent, luminance off white shade. And in the script under the time graph editor I turned down the transparency at the right moment to intensify its effect. And I turned it up to 100% transparency at the moment when the words "Impact Communications" come into place, covering the illumination of the light shining through from behind. The spot light in the back is a sphere created with a glow. The new Topas (5.0) has a procedural map called glow. This map is placed on a sphere or any other object. It is ideally used for spheres and it is to be used on an object that wraps around another object such as a wick from a candle. With the settings of the glow map to be color mapped none, and the alpha to be transparent, the outcome is a soft fall-off light around your inside object. In this instance I used it twice to emphasize the effect.

The script is a simple camera pan from black to the glowing sphere. Then I rotated the first rectangle on the z-axis setting the axis low to make it sweep in. The words "Impact Communications" is a straight fly in from the positive z-space (behind the camera). Notice

upon the stillness of the ending animation the background becomes white. I did this by changing the color of the glow in the time graph editor. Also a rendered the final frame of the animation over a white background. I saved that image and it was later used as a dissolve in edit.

## **K PAPER CHARACTERISTICS PROJECT**

**Client: Eastman Kodak Co., Rochester, NY**

A copier paper path is an excellent example of a typical animation for both Eastman Kodak Company and Xerox. This particular one is a 10 second edited animation consisting of 3 different parts. The first part is the copier machine in its entirety. The machine rotates around to an angle view from the side while the outer shell of the copier changes to 100% transparency becoming invisible in order to view the inside. The paper stack moves up and proceeds to feed into the copier a page at a time. The model was built with simple objects of extruded polygons and extruded circles. A texture map was added onto the belt of the paper path to add a more realistic illusion of lighting. The paper movement is done by a technique that took me months to figure out. For this purpose, I refuse to disclose any information on this. Before I discovered this special technique, all paper path animations (at least for Kodak and Xerox) were done only in edit by an editor. From my understanding, this process was time consuming, tedious and expensive to the client. To the best of my knowledge, only myself and one other person who worked with me knows of this technique. In a city where paper path animations are so popular, this knowledge gives me an edge over anyone else. I hope you understand that I have a right to this trade secret.

The second part is where you see the toner jumping onto the paper. The cylinders rotating were textured mapped with the transparency setting on the alpha channel, thus creating the invisible parts. Then they were rotated on the z-axis at a high degree. The toner that jumps onto the paper is another example of how the paper path technique can be useful. Part three is simply the paper going around cylinders to prepare for discharge from the copier.

## **L THE FALLING PAPER**

**Client: Eastman Kodak Co., Rochester, NY**

This is a simple representation of a piece of paper falling onto a stack of paper. It was intended to represent how a new product of Kodak's could help eliminate excessive paper work. The paper falling is a mesh-spline which was bent on a set bend axis. The stack of paper is extruded polygons where the side polygons were textured mapped with gray, subtle lines to create a more realistic look of a paper stack. I added a background polygon to have something to bounce the spot lights from, as well as, to use shadowing effects. The shadow edges are unintentionally jagged. I had the same problem with the shadow edges on the Vantez opening and it wasn't because the shadow quality was set too low. I still don't know why this sometimes happens. I think that sometimes the machine makes an error in calculating shadows. Since this project was just a quick video filler, the client didn't want it done over. It would have cost more money and more time, either of which was available.

## **M THE PAPER PATH PLACEMENT**

**Client: Eastman Kodak Co., Rochester, NY**

Another paper path animation illustrating the placement of paper into different trays. This

was done in addition to the "Paper Characteristics Project". You view inside a copier as the paper is about to be fed out. The lights blinking on and off indicate a signal that tells the output feeder to change positions. The lights were animated in the time graph editor by changing the polygon(s) color and luminance at the appropriate time. The output feeder is a simple rotation done by setting the "U" axis in the back of it. Additionally I used the paper path technique referred to earlier. The paper is animated to go into one tray and then the other. This shows how the copier machine has the ability to collate jobs.

## **N K.I.S LOGO SWEEP**

**Client: Eastman Kodak Co., Rochester, NY**

This is the third animation in the series of the Kodak Imaging Services animation (see Appendix C). I just took the logo from the previous animation with the globe and simply made it sweep across the screen over a black background. Kodak used this when the informational video was changing segments or topics.

## **O THE CLEANER PROJECT**

**Client: Eastman Kodak Co., Rochester, NY**

This project is of a 7 second animation with 5 dissolve images used for a marketing video of a cleaner product distributed by Eastman Kodak Company. The bags of cleaner in the box, the bottles, and the drums were to illustrate ways in which this product may be purchased. The bags of cleaner moving into the box were created by use of the polygon tool. The polygon was extruded and then the sides of the polygon were slightly beveled for a very subtle rounded shape. Then a texture map was added to each side of the object. The texture map was created in Adobe Photoshop on the Macintosh and then imported in to Topas as a Targa file. The map was created with a feel of a clear plastic bag over the blue contents. The object it was texture mapped onto was set with a slight transparency to emphasize its clearness better. The box is just a series of polygons pieced together. The top flaps had their rotational axes set to be on the folding plane so that I could easily rotate the flaps to a closing position. Then I animated the box to fly back and sit on the shelf. The movement was carefully calculated with the use of "ease in and ease out" Under the adjust spline command.

After that animation was completed I added the bottles of cleaner to the model. I built one bottle with a simple polygon that was then lathed. I didn't need to make this bottle into a spline since the bottle would have no moving points. I added to the bottle a texture map of a label. The label was created in Adobe Illustrator on the Macintosh and saved as an Encapsolated Postscript file (filename.eps). I opened that file into Adobe Photoshop and added the appropriate text to it. I realize that you can barely see the text. This was not a concern because it is not an important part of what was being illustrated. I saved the label as a Targa file and imported into Topas. I project mapped the label onto the bottle. Under the image placement option I positioned the label where I wanted it to be on the bottle. I also set the alpha to be transparent so that all that would appear on the bottle was the label. Once one bottle was done I simply copied it over and over placing them on the shelf. I rendered the model saving the image to be used in dissolves later. With each render I added more bottles until the shelves were completely filled. For the last dissolve I built and added the two drums. The drums are circles which were beveled to get the rings around the drums. Then I created the pump nozzles on the top and rendered the image.



## **P THE LILAC FESTIVAL**

**Client: Beau Productions, Rochester, NY**

This project was the very first animation job that Vantez, Inc. completed. At first it was to be a pro-bono piece, but because the project ended up costing me a lot more than anticipated, I managed to get a small amount reimbursed. A friend of mine was the coordinator for the Lilac Festival of 1993. She had made mention to me several months earlier that she would like to see an animated spot done for the event. Of course I offered my services immediately. At first she was not able to get any television station to donate air time, but then she got Channel 10 to donate the time. By the time this was arranged, I had only two weeks to complete the job from modeling to a finished rendered version. My company was very new and equipment was still limited. Fortunately Channel 10 was very helpful in supplying me with most of the equipment I needed.

My friend was very clear on what she wanted. The spot was to open up with snowflakes falling, and then having them change into petals of a lilac flower. Then she wanted a night image with stars flickering for representation of the night activities at the Lilac Festival. Then I was to animate the Lilac Festival logo. She wanted the pavilion included in the illustration in the 1993 official Lilac poster included into this segment.

The first step was to meet with the manager of Channel 10 to show him storyboards (see Appendix D). He liked the storyboards and gave me immediate approval. The first thing I did was the snowflakes. I created the snowflakes with polygons. To create a pattern that was exactly the same throughout I made a quarter of a circle. I created shapes about the circle and then drilled it, deleting the shapes. I mirrored off the quarter to match up on the horizontal axis. Then I mirrored the half circle to match up on the vertical axis creating a perfectly symmetrical snowflake. I made a few of these snowflakes the same way using different shapes to get some variation.

Next I needed to create lilac petals. Since I had very little time to complete this job I wanted to ensure that I would spend the time efficiently, so instead of reshaping a spline mesh I decided I could achieve the same look with a sphere, drilling away three quarters of it. I first drilled half of the sphere away. With the other half I made a polygon in the shape of the side of a petal. I drilled the half sphere with the shape without deleting it. Then I mirrored it and did the same to the other side. I copied the quarter sphere three more times and matched them up point to point at the tip. I grouped them together, colored them and then I had my petal. I copied the petal off several times for the animation script. Then I created two different backgrounds. One was a night sky with stars and the other a cloud background with a hint of yellow for a sunshine effect. Both done in Adobe Photoshop on the Macintosh.

The snowflakes and the petals were simultaneously scripted. The snowflakes started first. Then the petals mixed in with the snowflakes, finishing with the petals alone. First I used a lot of key frames to make them sway from side to side. Then I animated them as a group to move down over the screen. I revolved the camera upward at an angle to make the snowflakes and the lilac petals appear to be falling into the camera. I rendered the snowflake/petal animation twice. The first time over the sky background. The second time over the cloud background. This was so the editor could switch from one background to the next to match the voice over.

The next part of the commercial spot was where the night sky would appear with the stars flickering. This was simply all done in Adobe Photoshop. I used the first sky picture and just added highlights to a couple of stars. Then I saved that picture under another name as a targa file. I opened the original sky picture in Photoshop again and this time highlighted a couple of

different stars. I saved that picture under a different name as a targa file. I repeated this process a few more times. The editor dissolved from one picture to the next creating the illusion of flickering stars.

The final part of the commercial spot (the logo animation) required two different backgrounds as well. The first was the sky picture with an added image of the "Ticket Express" logo. The second was a picture using the pavilion that was used on the Lilac Festival poster. The "Ticket Express" logo was created in Adobe Illustrator and imported into Topas. I used the sky picture as the background, and saved that image.

The pavilion scene was created completely in Topas. The floor of the pavilion was done by beginning with a circle. I then made inside circles and polygon wedges along the axes to use for drilling, giving me block like shapes that fit together forming a circle. I beveled the polygons. I used a texture map of a fine red stone to make them appear a little more like bricks. The pavilion was created in Adobe Illustrator because it is easy to make straight edges and arches symmetrical by the use of mirroring one side and joining the points. I imported the outline into Topas as a model. I extruded and colored it. The lilac flowers were created beginning with the lilac petal I had originally made. I made a very small circle. I placed several circles around the small circle, one below the other increasing in size. I used this series of circles as a template to match the petals around them. When I placed all the petals where I wanted them I deleted the circles. I rotated some of the petals so there would be some variation in their directions. When finished it looked like a lilac flower. The leaves were built much the same way as the petals. I just used a larger sphere. I added a special touch in the leaves by adding a texture map on them of a black and white image of veins. In the texture map settings I set the color to be none and I bumped mapped the alpha channel so that the veins would pop out a little bit. I used the cloud background as a background to the model. I added the "1993" to the top. I Rendered the entire model, saved it as an image, and used that image as a background to the "Lilac Festival" logo animation.

For the "Lilac Festival" logo I was provided with a black and white photostat of the "Lilac Festival" logo. I scanned it into the Macintosh saving it as a pict file (filename.pict). I opened the pict file into Adobe Illustrator and used it as a template to create the outline of the logo. This was a very tedious job because the logo is very complex. It had to be exact. When this was finished I had an outline of the logo which as I mentioned several times already can be imported into Topas as a model. I drilled the appropriate spots, extruded the logo and colored it. I colored the front polygons a different shade to add more of a highlight to the front keeping the extruded polygons darker for depth and variation. I changed the logo's axis to be set along the bottom horizontal edge. Since the backgrounds were to switch during the animation, I had to animate the logo so that at one point the model would fill the screen. I started off with the ticket express background having the logo greatly extruded. I made the logo slide in from below the camera to the upper part of the screen. When the logo was in place I rotated it on the horizontal axis to swing up over the screen. When the screen was completely covered with the logo I ended that part of the animation during rendering. I changed the background then and continued the animation making the logo appear to unextrude and shrink into place. There were enough frames of the model filling the screen that the editor could cut from one animation to the next still making it appear to be one continuous animation. I managed to finish the entire project the very morning that the edit session was scheduled to take place.

### III CONCLUSION

Much of the animation industry uses high-end animation systems such as the Silicon Graphics package. There are many wonderful software packages available for Silicon Graphics, but I think the Topas software, when pushed to it's limits, can do 80% of a high-end system.

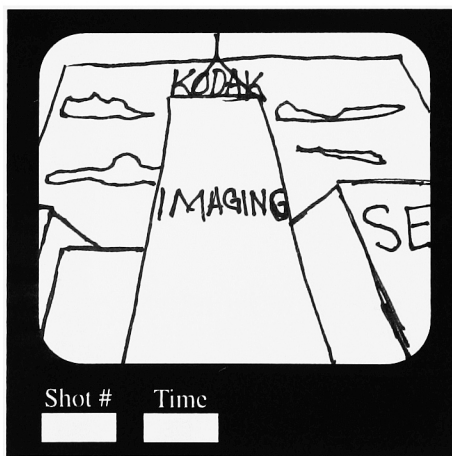
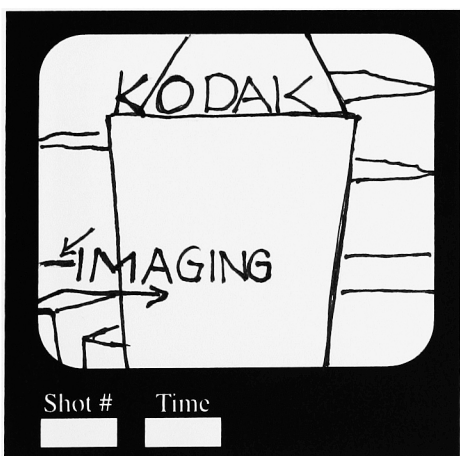
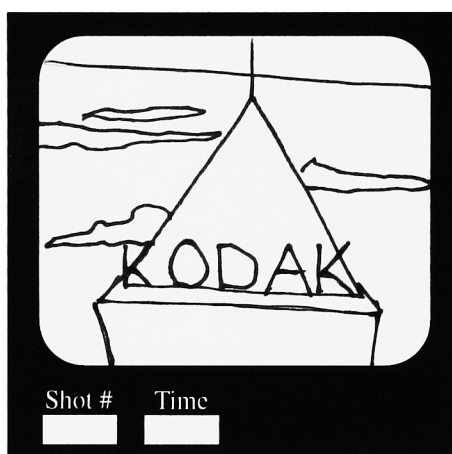
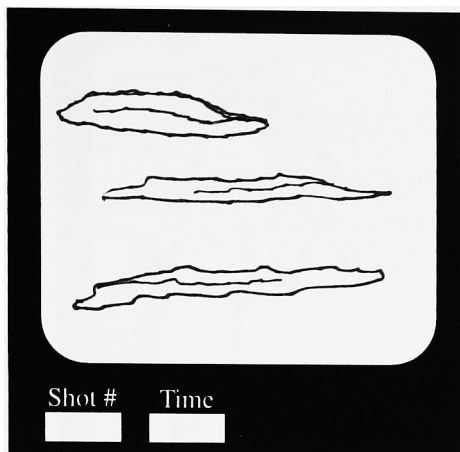
The most important lessons I learned about doing animations is to always expect the unexpected. Always anticipate problems. They will occur almost every time if not every time. When you bid on a job keep in mind not only the time to build, script and render an animation, but also allow extra time for corrections on mistakes. If you're not doing corrections then I'm sure you'll be doing last minute changes from your client. People often change their minds late in the game but still expect you to meet their original deadline if not earlier.

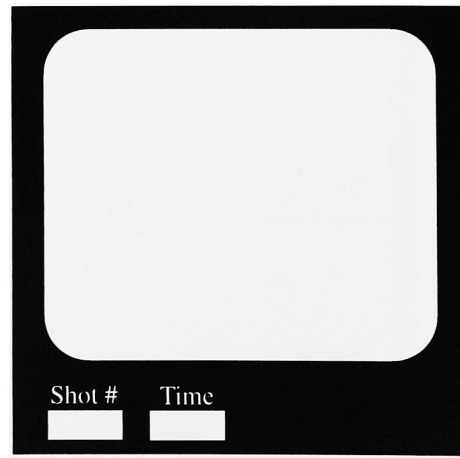
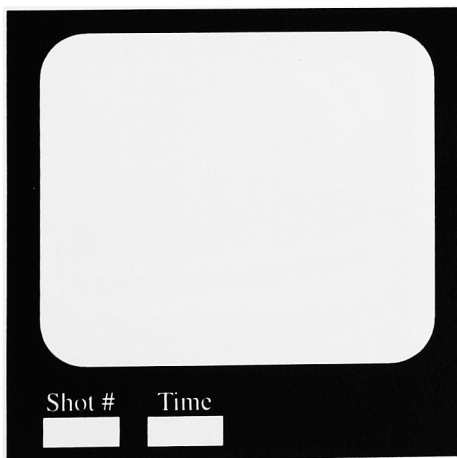
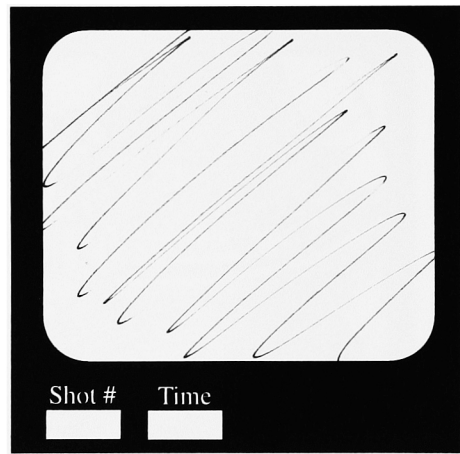
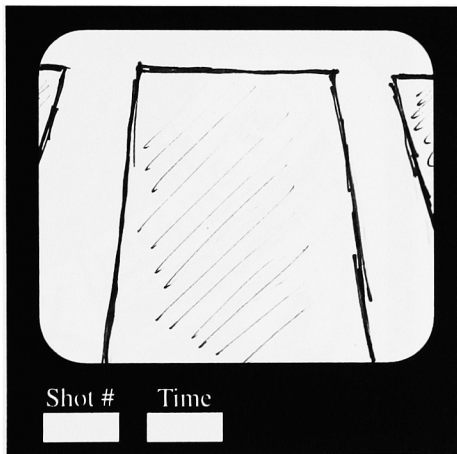
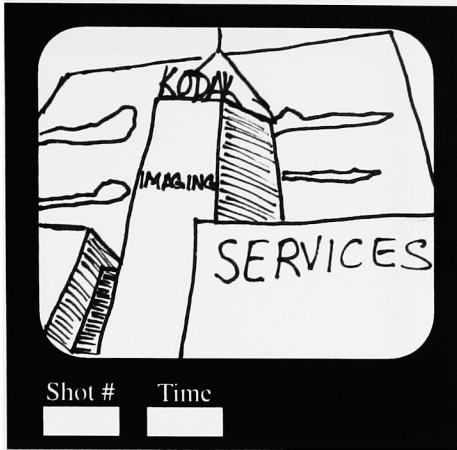
The most frustrating thing I have had to deal with in the animation industry is the expectations of the clients. People will approach you with a job and they'll want it to be some amazingly elaborate animation. Then they'll tell you that you only have a couple of days to complete it. To a non-animator there is absolutely no understanding of how time consuming animation is. Even if you know your software like the back of your hand, you can still only work as fast as the machine will allow you to. You can still only produce a rendered animation as fast as the system will render it. This is also frustrating to my creativity as an animator. So often I had images in my mind of creating an elaborate animation piece for a client. Then I found out I had to cut out a lot of the special effects in order to meet the clients deadline. If a client is not concerned with their deadline then they are concerned with their budget. Listen to what they want, assess the ability of the system you are using, assess your own abilities, assess the time frame allowed and their budget. Then let your client know exactly what's the best they can expect, for their limitations. Above all else, never promise something to a client that you don't feel comfortable and confident with. If you don't produce what you said you would, your reputation as an animator could be ruined. If that happens it is very difficult to change it. Because the business runs on word of mouth.

Overall, I am very pleased with this tape. I like that it shows several different examples of the kind of animation I can do, as opposed to just one, 3-5 minute animation piece. I think the editing and sound effects are exemplary of professionalism. Although I personally did not do the edit or apply the sound effects, I did make the decisions on when an edit cut took place, the order of the animations, and where and how the sound would be administered. I enjoyed being a producer very much and I feel I have the talent for it.

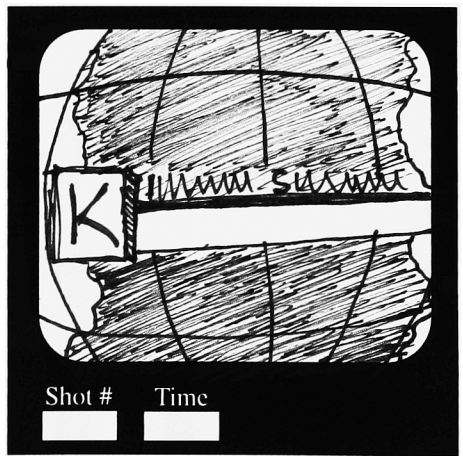
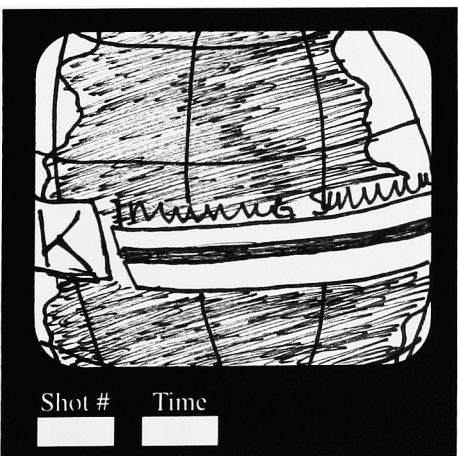
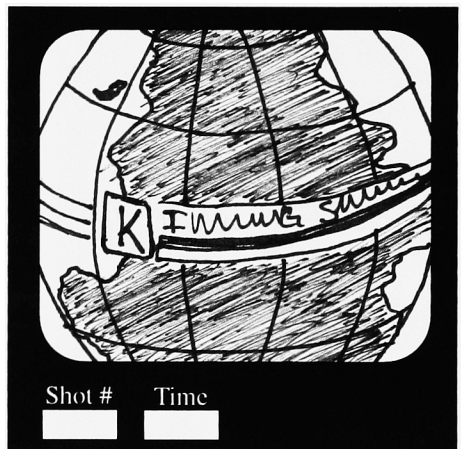
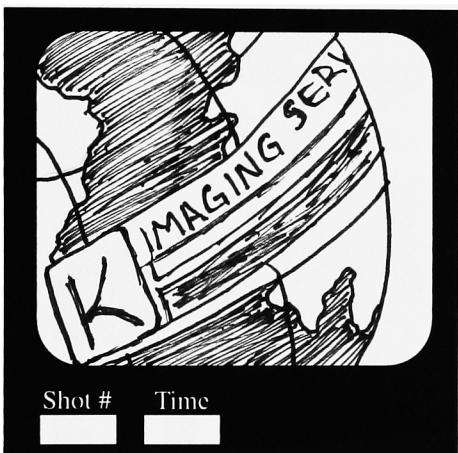
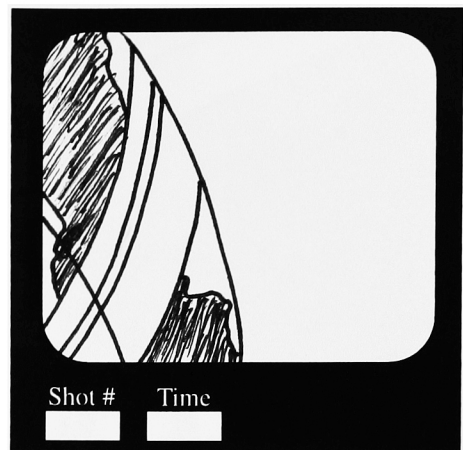
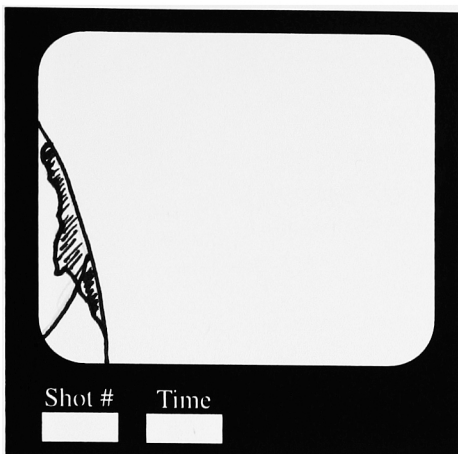
I learned a lot about animation in the last two years. The most important of which is to be realistic when you think about the kind of animating you will do in the work place. Only a very few get the exceptional job of creating wonderful, award winning animations with large budgets and sufficient time frames. Most animators find themselves in a position where the animation is to be done at low cost and fast. This is what taught me my second lesson about animating. Be proficient with your software. Once you know all there is to know about the software you are using, you will be able to determine the best route to take in completing a job efficiently. Once you know what it is you are striving to create, you have to think of all the possibilities that will get you to that destination. Then pick the path of least resistance. They may not be award winning animations, but you will be a winner in the animation industry.

#### IV APPENDIX A

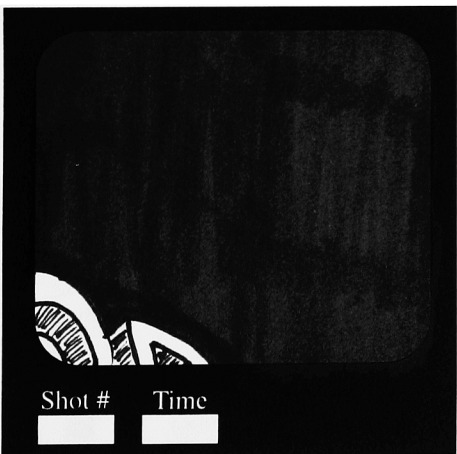
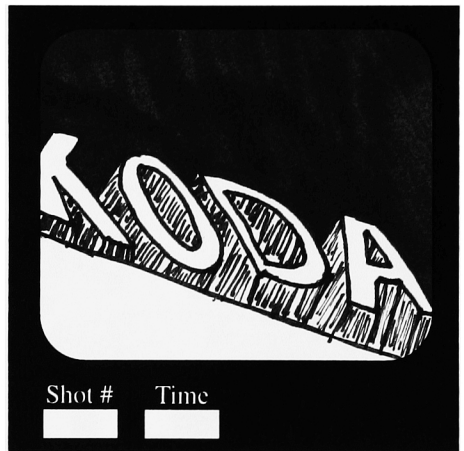
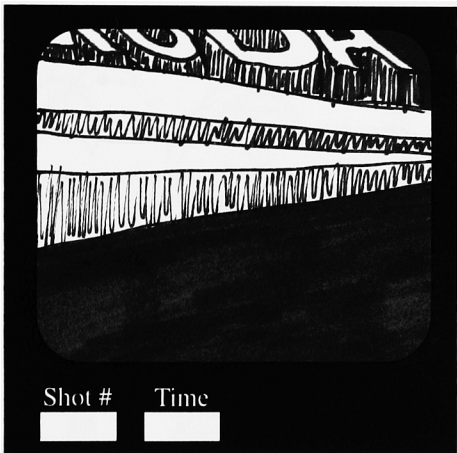




#### IV APPENDIX B

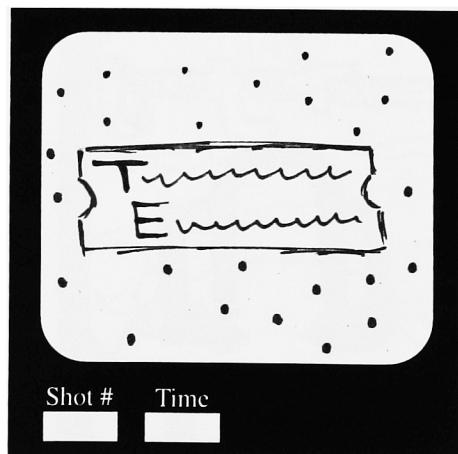
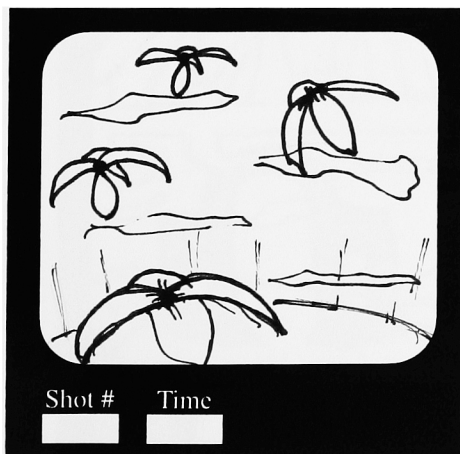
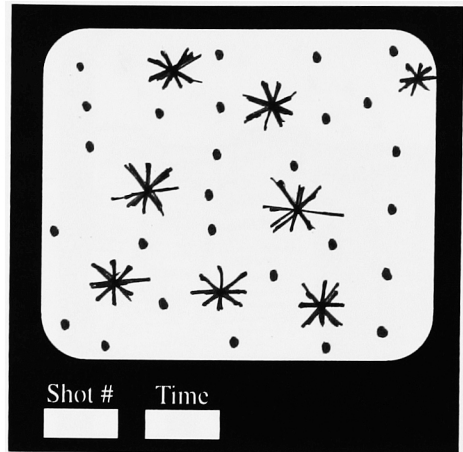
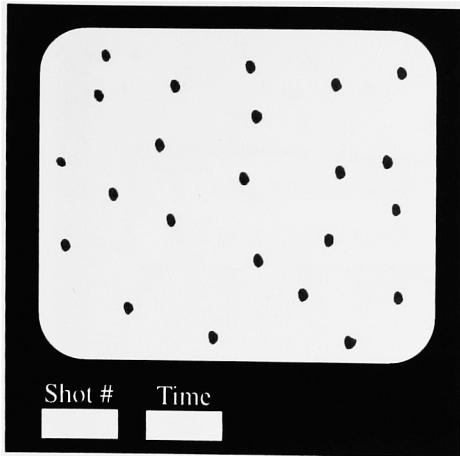


#### IV APPENDIX C

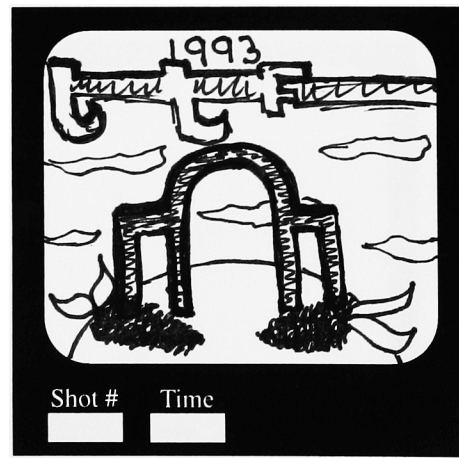
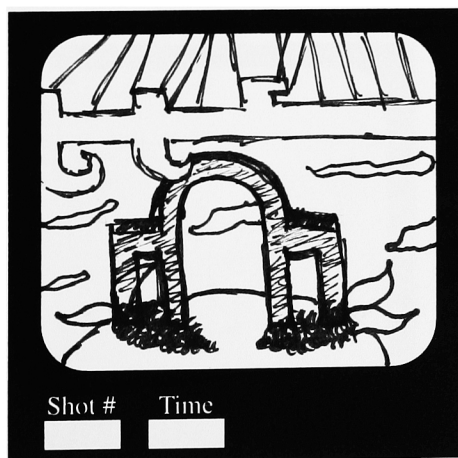
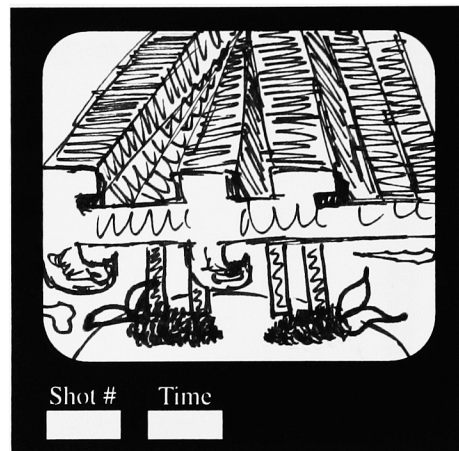
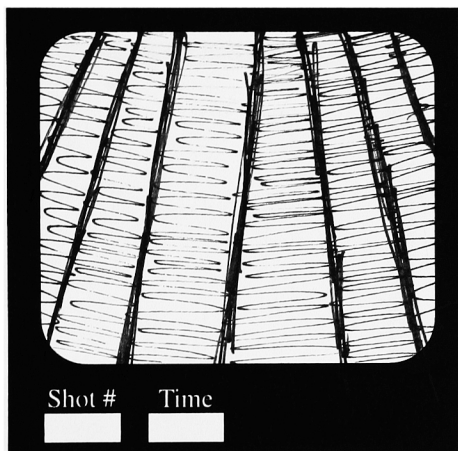
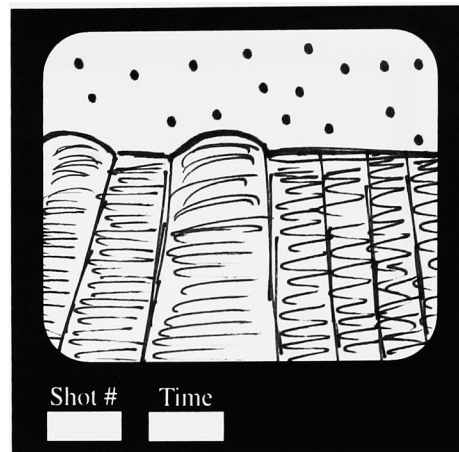
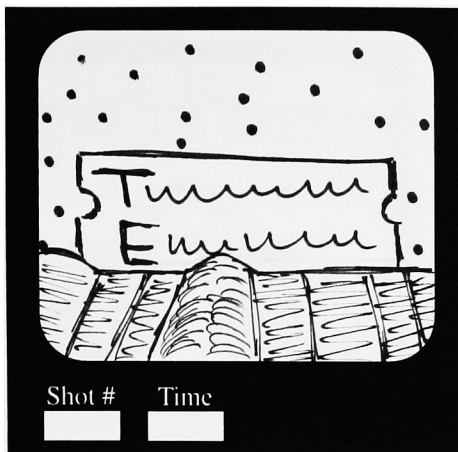


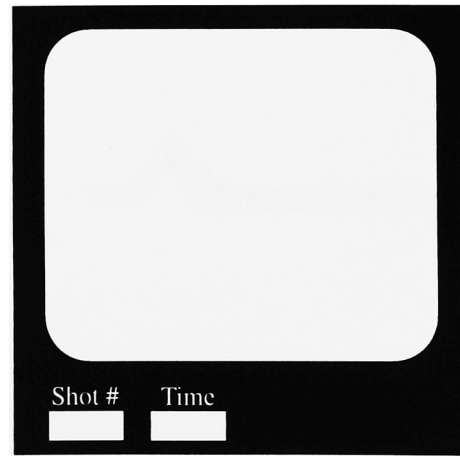
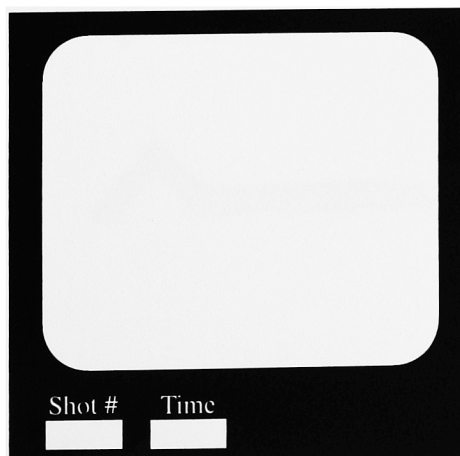
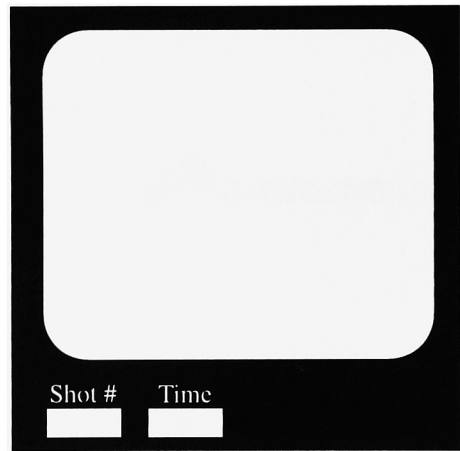
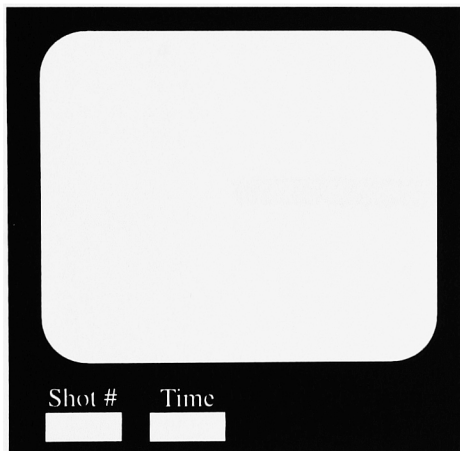
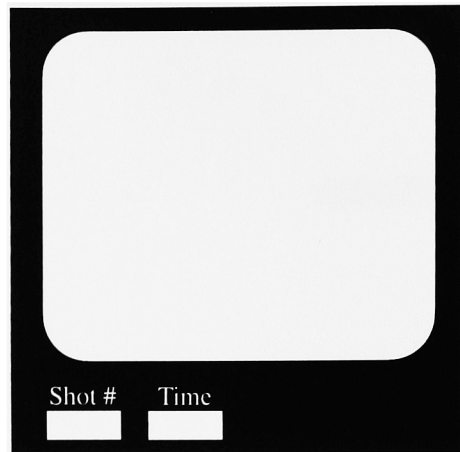


#### IV APPENDIX D









# VIII APPENDIX F

